November 21, 2014 – CBIA Forum

High Hanging Fruit: The Two Hardest ZNE Measures in the 2016 Code (1/1/2017 adoption date)

- 1. High Performance Attics
- 2. High R-Value Walls













Recommended Installations

High Performance Attics and Ducts in Conditioned Space: Get the ducts out of *hot*, *hot* space

- 1. High Performance Attic or HPA
 - Install a secondary layer of insulation along the roof deck of a standard vented attic.
- 2. Sealed/unvented attic
 - Move the thermal envelope to the roof deck
- 3. In the house
 - Attic plenum, drop-ceiling or between floors
- 4. Go ductless

High R-value Walls (≤ 0.050 assembly U-Factor)

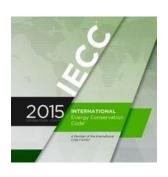
- 1. High Density batt: 2x6, 16" OC, R-21 cavity fill, 1" R-5 rigid
- 2. Wide framing: 2x6, 24" OC, R-19 cavity fill, 1" R-5 rigid
- 3. Non-traditional wall assemblies including;
 - Double walls, staggered stud walls, SIPs, ICFs



Benefits of a better envelope

- Prepare for 2016 Title 24 and align with other top-tier building standards
- Increase CAHP incentives ≈ \$200 to \$800 more per home
 - Potential to stack CAHP points, up to a \$2,600 more
- Appeal to the ZNE and green minded buyer for better absorption rates
- Save energy: more than any other individual measures available
- Save money: with early intervention and design planning, incentives can outpace incremental costs













Utility Support:

Big-Two Integrated Design Program

Under development now, and planned for January launch

- 1. Design charrette: specification assistance at the planning stage
 - Get the ball rolling in the right direction
- 2. Value engineering meeting coordination
 - Keep the entire project team on the same page
- 3. Product-manufacturer installation guides
 - Installation training and specs from the source
- 4. Assistance and verification during construction
 - Ensure the lots get built as intended, deal with unexpected challenges in the field
- 5. Per-project incentives to offset some costs of a disrupted construction schedule

Get Involved Now!

25 Months until 2016 T24

Builders: PG&E seeks 10 projects to enroll in 2015 Q1

- 6 projects to do both measures,
- 3 for just walls,
- 3 for just attics
- Pre-design stage, 25 or more lots scheduled to complete by 12/31/2015
- Receive design help and per project incentives from big-two support program
- Increase the available per-home incentive from CAHP
- Prepare for 2016 code now

Product Manufacturers: Seeking installation guides and innovative solutions

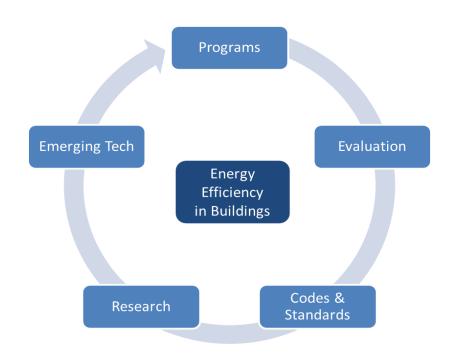
- Insulation on the roof deck (above or below)
- High R-Value wall and finish assemblies
 - Rigid exterior at R-5 or R-6 per inch
- Ductless systems for the mass-market



Thank you!

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We're here to help builders today for tomorrow's environment.



